



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,325	12/20/2005	Richard Colin Fitzgerald	356952.00040-US	5691

78905 7590 10/16/2008
Saul Ewing LLP (Philadelphia)
Attn: Patent Docket Clerk
2 North Second St.
Harrisburg, PA 17101

EXAMINER

LEIBOVICH, YAIR

ART UNIT	PAPER NUMBER
----------	--------------

2114

MAIL DATE	DELIVERY MODE
-----------	---------------

10/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,325	FITZGERALD, RICHARD COLIN	
	Examiner	Art Unit	
	YAIR LEIBOVICH	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/9/2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4, 12-13, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over VanRooven (US 6,591,376 B1) in view of Wilks (US 6,944,757 B2).

For Claim 1,

- VanRooven teaches: a portable computing device (see abstract line 3), controlled by an operating system (see abstract lines 2), in which, if the operating system is intact (column 2 lines 16-25, and column 3 lines 8-11) but an internal non-volatile memory drive (see figure 1 element 106 and column 3 line 1) that is used to boot the device (see figure 2 step 204 and column 3 lines 8-9) is found to be corrupted (see column 3 line 12), then the non-volatile memory (figure 1 element 106) is automatically swapped (see figure 2 step 208/202) with a temporary RAM drive (see column 3 line 9 and column 5 line 30) to enable the operating system to boot (see column 3 line 8-11).
- VanRooven does not teach booting to a functional GUI.
- However, Wilks teaches booting to a functional GUI (see column 2 lines 37-38).

Art Unit: 2114

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include booting to a functional GUI, as taught by Wilks, to provide enhanced interface capabilities.

For Claim 2,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- VanRooven does not teach: non-volatile memory is a flash memory.
- However, Wilks teaches non-volatile memory is a flash memory (see figure 1 element 124 and column 6 lines 51-52).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include non-volatile memory is a flash memory, as taught by Wilks, to provide enhanced system functionality and flexibility.

For claim 4,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- VanRooven further teaches default configuration files automatically copied to RAM drive (see column 3 lines 8-10).

Art Unit: 2114

For Claim 12,

- VanRooven teaches: A method of enabling a portable computing device (see abstract line 3) to boot up (see figure 1 step 124 and abstract lines 2-3), when its resident operating system is intact (column 2 lines 16-25, and column 3 lines 8-11) but an internal non-volatile memory drive (see figure 1 element 106 and column 3 line 1) that is normally used to boot up from (see figure 2 step 204 and column 3 lines 8-9) is found to be corrupt, (see column 3 line 12), comprising the step of automatically swapping (see figure 2 step 208/202) the corrupt non-volatile memory drive (figure 1 element 106, 108) with a temporary RAM drive (see column 3 line 9 and column 5 line 30) to enable the resident operating system to boot (see column 3 line 8-11).
- VanRooven does not teach booting to a functional GUI.
- However, Wilks teaches booting to a functional GUI (see column 2 lines 37-38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include booting to a functional GUI, as taught by Wilks, to provide enhanced interface capabilities.

For Claim 13,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
- VanRooven does not teach: non-volatile memory is a flash memory.
- However, Wilks teaches non-volatile memory is a flash memory (see figure 1 element 124 and column 6 lines 51-52).

Art Unit: 2114

- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify VanRooven to include non-volatile memory is a flash memory, as taught by Wilks, to provide enhanced system functionality and flexibility.

For claim 15,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
- VanRooven further teaches default configuration files automatically copied to RAM drive (see column 3 lines 8-10).

For claim 23,

- The claim recites essentially similar limitations as in claim 1 except for “computer program product” and “computer readable storage medium” and “first program instructions stored on said medium”

VanRooven teaches “computer program product” (see column 1 lines 16-19) and “computer readable storage medium” (see figure 1 blocks 108 and 106) and “first program instructions stored on said medium” (see column 2 line 14). The claim is therefore rejected under the same grounds as claim 1.

3. Claims 3, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1, and 12 respectively above, and further in view of Suprunov (US 6,421,009 B2).

Art Unit: 2114

For claim 3,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach temporary RAM drive allows at least emergency voice calls to be made.
- However, Suprunov teaches temporary RAM drive (see column 4 line 38) allows at least emergency voice calls (see column 4 line 39-40) to be made (see column 4 line 39).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks so that the temporary RAM drive allows at least emergency voice calls to be made as taught by Suprunov, to provide enhanced minimum functionality under faulty conditions.

For claim 14,

- The combination of VanRooven and Wilks teaches the limitations of claim 12 for the reasons above.
- The combination of VanRooven and Wilks does not teach temporary RAM drive allows at least emergency voice calls to be made.
- However, Suprunov teaches temporary RAM drive (see column 4 line 38) allows at least emergency voice calls (see column 4 line 39-40) to be made (see column 4 line 39).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks so that the temporary

Art Unit: 2114

RAM drive allows at least emergency voice calls to be made as taught by Suprunov, to provide enhanced minimum functionality under faulty conditions.

4. Claims 5-6, 11, 16-17, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1, and 12 respectively above, and further in view of Maffezzoni (US 6,532,535 B1).

For Claim 5,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting.
- However, Maffezzoni teaches corrupt drive (column 39 line 64) is automatically moved to a different drive letter to allow subsequent reformatting (Column 39 line 62 through column 40 line 44, and column 39 table 19 lines 24-42).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting, as taught by Maffezzoni, to improve reliability and compatibility of formatting.

Art Unit: 2114

For Claim 6,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification asking if reformatting should take place.
- However, Maffezzoni teaches device (column 3 line 40) displays a user notification asking (column 43 lines 43-44) if reformatting should take place (Figure 8 step 466, and Column 43 lines 44-45).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification asking if reformatting should take place as taught by Maffezzoni, to avoid unnecessary loss of data, and to improve recover capabilities.

For Claim 11,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state.

Art Unit: 2114

- However, Maffezzoni teaches internal non-volatile memory drive is found to be corrupted if: (d) user data is not corrupt but metadata is corrupt (column 39 lines 53-57).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state, as taught by Maffezzoni, to enhance system recoverability from errors.

For Claim 16,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting.
- However, Maffezzoni teaches corrupt drive is automatically moved to a different drive letter to allow subsequent reformatting. (Column 39 line 62 through column 40 line 44, and column 39 table 19 lines 24-42).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include corrupt drive is automatically moved to a different drive letter to allow subsequent

Art Unit: 2114

reformatting, as taught by Maffezzoni, to improve reliability and compatibility of formatting.

For Claim 17,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification asking if reformatting should take place.
- However, Maffezzoni teaches device (column 3 line 40) displays a user notification asking (column 43 lines 43-44) if reformatting should take place (Figure 8 step 466, and Column 43 lines 44-45).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification asking if reformatting should take place as taught by Maffezzoni, to avoid unnecessary loss of data, and to improve recover capabilities.

For Claim 22,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata

Art Unit: 2114

is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state.

- However, Maffezzoni teaches internal non-volatile memory drive is found to be corrupted if: (d) user data is not corrupt but metadata is corrupt (column 39 lines 53-57).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include internal non-volatile memory drive is found to be corrupted if any of the following apply: (a) existing data cannot be read; (b) new data cannot be written; (c) user data is corrupt but metadata is not corrupt; (d) user data is not corrupt but metadata is corrupt; (e) it is in a read-only state, as taught by Maffezzoni, to enhance system recoverability from errors.

5. Claims 7-9, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1 and 12 respectively above, and in further view of Duske (US 6,992,991 B2).

For Claim 7,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that the temporary RAM drive is in use.

Art Unit: 2114

- However, Duske teaches device displays a user notification that the temporary RAM drive is in use (Column 66 line 35, 53, column 17 lines 55-58, and column 26 lines 24-27).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user notification that the temporary RAM drive is in use, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 8,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are disabled.
- However, Duske teaches device displays user notification that save options are disabled (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays user notification that save options are disabled, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 9,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.

Art Unit: 2114

- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are not available.
- However, Duske teaches device displays user notification that save options are not available (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification that save options are not available, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 18,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that the temporary RAM drive is in use.
- However, Duske teaches device displays a user notification that the temporary RAM drive is in use (Column 66 line 35, 53, column 17 lines 55-58, and column 26 lines 24-27).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user notification that the temporary RAM drive is in use, as taught by Duske, to improve user awareness of faulty conditions.

Art Unit: 2114

For Claim 19,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are disabled.
- However, Duske teaches device displays user notification that save options are disabled (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays user notification that save options are disabled, as taught by Duske, to improve user awareness of faulty conditions.

For Claim 20,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user notification that save options are not available.
- However, Duske teaches device displays user notification that save options are not available (Column 28 line 52 and further in column 45 line 38).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of VanRooven and Wilks to include device displays a user notification that save options are not available, as taught by Duske, to improve user awareness of faulty conditions.

Art Unit: 2114

6. Claims 10, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of VanRooven (US 6,591,376 B1) and Wilks (US 6,944,757 B2), as applied to claims 1 and 12 respectively above, and in further view of Harris (US 6,853,710 B2).

For Claim 10,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.
- The combination of VanRooven and Wilks does not teach device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive.
- However, Harris teaches device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive (Column 13 lines 60-64).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive, as taught by Harris, to improve system restorability from faults.

For Claim 21,

- The combination of VanRooven and Wilks teaches the limitations of claim 1 for the reasons above.

Art Unit: 2114

- The combination of VanRooven and Wilks does not teach device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive.
- However, Harris teaches device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive (Column 13 lines 60-64).
- It would have been obvious to one of ordinary skill in the art at the time the invention was made to Modify the combination of VanRooven and Wilks to include device displays a user option which, if selected, initiates an attempt to extract data from the corrupt internal flash memory drive, as taught by Harris, to improve system restorability from faults.

Response to Arguments

7. Applicant's arguments filed on 7/9/2008 have been fully considered but they are not persuasive.

- Applicant essentially argues that VanRooven does not disclose the condition of the operating system being intact.
- Applicant's arguments are not persuasive; the meaning of the word intact to a person of ordinary skill in the art is "being complete in form and function". Column 2 lines 14-16 recite "the embedded operating system or critical components of the embedded operating system..." This is a clear reference to both form and function:

Art Unit: 2114

without the “critical components”, the function would not be complete. Also, VanRooven uses the word “integrity” in column 3 line 10 which is similar to intact.

- The applicant in his/her arguments, also refers to features which are not in the claims such as “guarantee of being intact” in conjunction with “performing checks upon itself”. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)
- Applicant essentially argues that “temporary RAM drive”, as claimed, is not the same as RAM disk partition, as recited by VanRooven.
- Applicant’s arguments are not persuasive because the terms “RAM disk” and “RAM drive” are used interchangeably in the art: see Grust (US 2003/0167261 A1) in paragraph [0011] line 17 “RAM disk (also known as RAM drive) which is generally...” (see pertinent art cited section of this office action). Also, the term “temporary”, as claimed (and “partition” as recited by VanRooven) is very generic, and the cited art therefore reads on the claim.
- The applicant in his/her arguments also refers to features which are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Art Unit: 2114

- Applicant essentially argues that “swapping” as claimed, corresponds to a different swap function recited by VanRooven, and refers to features not recited in the rejected claims.
- Applicant’s arguments are not persuasive because the claims are interpreted in light of the specification; limitations from the specification are not read into the claims.
- Applicant essentially argues that VanRooven does not teach “enabling booting when the non-volatile system is corrupt”.
- Applicant’s arguments are not persuasive because “rebuild the primary image in case of corruption” (column 3 lines 11-12) clearly suggest to a person of ordinary skill in the art the function of enabling booting when the non-volatile system is corrupt.
- The applicant in his/her arguments also refers to features which are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US 2003/0167261 A1 (Grust: Small Footprint Applicative Query Interpreter Method, System and Program Product).

9. Applicant's arguments filed on 7/9/2008 have been fully considered but they are not persuasive. The present invention as claimed, is taught by the references cited, and the Prima Facie case of obviousness was indeed established in the first office action of date 1/9/2008, and the rejection to all claims is therefore maintained.

10. Both the original and amended claim 23 recites essentially similar limitations as in claim 1; therefore claim 23 is finally rejected as well.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YAIR LEIBOVICH whose telephone number is

Art Unit: 2114

(571)270-3796. The examiner can normally be reached on Monday-Thursday 6:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Badderman can be reached on (571)272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Y.L.

/Scott T Baderman/

Supervisory Patent Examiner, Art Unit 2114